



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

m/

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,851	04/10/2000	Yasuyuki Sónoda	2406-5	3157

22204 7590 11/16/2006

NIXON PEABODY, LLP  
401 9TH STREET, NW  
SUITE 900  
WASHINGTON, DC 20004-2128

EXAMINER

HOYE, MICHAEL W

ART UNIT PAPER NUMBER

2623

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/545,851	Applicant(s) SONODA ET AL.	
	Examiner Michael W. Hoye	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 39,40,42-56,59-61 and 70-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 39,40,42-56,59-61 and 70-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicants' arguments, filed on August 29, 2006, with respect to claims 39-40, 42-56, 59-61 and 70-74 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Objections*

2. Claim 70 is objected to because of the following informalities: in line 17, the claimed "retrial information is failed" should be --retrial information has failed--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 39-40, 42, 48-56, 59 and 70-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al (USPN 6,237,146), in view of Gammie et al (USPN 5,270,809), both cited by the Examiner.

As to claim 39, the claim is rejected based on similar grounds as the rejection of claims 40 and 56, as described below.

As to claim 40, note the Richards et al reference which discloses a television receiver 30 (col. 3, lines 8-9). The claimed displaying images in response to receipt of data transmitted by a broadcasting device is met by the Digital Video Home Terminals (DHVT 14) as shown in Fig. 1, which are connected to a television set 30 for displaying images that were transmitted from the Administration and Maintenance Interface (AMI) 23 (col. 3, lines 5-19). Regarding the claimed, “transmitting response information to response information receiving equipment via a separate communication line”, Richards et al discloses that the DHVT 14 may uplink information over communication line 18/22 to the AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). Richards et al does not explicitly disclose a “separate” communication line. However, Gammie et al specifically teaches an integrated receiver decoder 206, which receives broadcast data via a satellite link 205 and also transmits and receives data via a separate communication link as met by telephone network 207 (see Fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Richards et al reference with the additional teachings of the Gammie et al reference which teaches or discloses the use of a separate communication line (i.e. a telephone network) for use in transmitting and receiving data at a receiver system for the advantage of providing two way communications in systems where the broadcast network is only a unidirectional network (i.e. a satellite receiver system). In addition to, it is also well known to have separate communication links, such as telephone networks, in cable TV or broadband communication systems where there is limited or no upstream communication capabilities. One of ordinary skill in the art would have been led to make such a modification since the use of a separate communication line is well known in the art for the advantages given above. The claimed, “wherein the television

Art Unit: 2623

receiver performs the following processing: 1) receiving determining data for determining initial transmission scheduling time and retrieval information containing a retrieval period transmitted by said broadcasting station at the same time; 2) calculating the initial transmission scheduling time with a random number at each of said receivers using the determining data for determining initial transmission scheduling time, and receiving response information via a separate communication line when the initial transmission scheduling time comes; 3) when communication between the television receivers and the response information receiving equipment is unsuccessful, adding the retrieval period to the initial transmission scheduling time to calculate retrieval transmission scheduling time, and retransmitting the retrieval information via a separate communication line at the calculated scheduling time; 4) when the retransmission of the retrieval information has failed, calculating a subsequent retrieval transmission scheduling time by adding the retrieval period to the retrieval transmission scheduling time; and 5) repeating a process for retransmitting the retrieval information via a separate communication line at the subsequent retrieval transmission scheduling time until the retransmission of the retrieval information is successful” is met in part by the Richards et al. reference, which discloses that the cable headend 12 typically includes an Administration and Maintenance Interface (AMI) 23 that generates randomized back-off arrays, and each DVHT 14 has its own back-off array, which the AMI 23 downloads to the DVHT 14 (see col. 2, line 66 – col. 3, line 4). In accordance with one aspect of the Richards et al reference, “the DVHT 14 includes a processor (e.g., central processing unit) 38 and Random Access Memory (RAM) 40 connected to the processor (FIG. 2). Also, Read Only Memory (ROM) 42 has a boot program 43 that is operable when the DVHT 14 is initially turned on. The boot program 43 loads and allows the first part of an initialization of the DVHT 14 with the AMI 23.

Art Unit: 2623

During the initialization of the DVHT 14, the AMI 23 then transmits along the RF Trunk 18 to the initializing DVHT 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 without collision with other messages from another subscriber DVHT. This "Boot" program 43 allows registration of the DVHT 14 with the AMI 23. At the time that a DVHT 14 is registered within the AMI 23 of the cable system 10, the DVHT has been initialized with a randomized back-off array." (see col. 5, lines 35-51) The random back-off consists of two algorithms, a uniformly distributed retry algorithm and an exponential retry algorithm (see col. 5, line 57 – col. 6, line 42). In reattempting message transmissions [by the DVHT], "the first set of message transmissions are reattempted after a respective time-out. That is a first randomized interval of time such as between 0 to 100 milliseconds. After these first reattempts, the DVHT then reattempts message transmission after a respective time-out. That is a second randomized interval of time such as between 0 to 1,000 milliseconds. The randomized interval of time can be calculated from a uniformly distributed retry algorithm and the second randomized interval of time can be calculated from exponential retry algorithm" (see col. 6, lines 43-53, also see col. 7, lines 1-25 and claims 1-5). Therefore, the AMI generates and transmits to a DVHT a randomized back-off array, and the DVHT attempts and then reattempts, if necessary, message transmissions based on a respective time-out period that is a randomized interval of time which is calculated from the retry algorithms stored in the DVHT. The Richards et al reference also discloses in col. 6, lines 56-60, that more traditional methods specifically teach that randomization is accomplished by the entity that is transmitting the messages in traffic (e.g., the DVHT 14). Or, in other words, it is well known to those of ordinary skill in the art to calculate the initial transmission scheduling item with random

Art Unit: 2623

numbers at each receiver, as claimed above. The claimed use of a "separate communication line" is met by the Gammie et al reference as described above.

As to claims 42 and 59, the Richards et al reference as combined with Gammie et al further discloses the claimed television and data receiver as described above in claims 40 and 56 respectively. The Richards et al reference does not specifically disclose determination as to whether or not to make retrieval transmission is made on basis of transmission end time provided by the broadcasting device. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to allow only a limited time period for some types of retrieval transmissions to occur for the advantage of not allowing a receiver to send a response to an interactive broadcast once a window of interaction time period has expired. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to allow only a limited time period for some types of retrieval transmissions to occur for the advantage given above.

As to claim 48, the Richards et al reference as combined with Gammie et al discloses the claimed television and data receiver as described above in claim 40. Richards further discloses that the type of messages may involve Pay-per-view matters (col. 5, lines 28-35). Although, the Richards et al reference does not specifically disclose that the time remaining for transmission is computed from a transmission end time sent from said broadcast unit, and said retrieval transmission conditions are altered according to said time remaining for transmission. For example, it is inherent that there is only a limited time that a user may purchase and view a pay-per-view event, therefore, there would only be a certain amount of time remaining for transmission which is determined by a transmission end time that would be sent from the

Art Unit: 2623

broadcast unit and whereby the retrieval conditions would be altered according to the remaining time left for transmission.

As to claim 49, the Richards et al reference as combined with Gammie et al further discloses the claimed notification data that is generated for making notification of the results of communications with the response information receiving equipment as met by acknowledgement or other information that is sent back to the DVHT 14 from the AMI 23 (see col. 7, lines 9-12).

As to claim 50, the Richards et al reference as combined with Gammie et al discloses that the claimed communication results are received from the response information receiving equipment or AMI 23 and notification data is generated as described above in claim 15.

As to claim 51, the Richards et al reference as combined with Gammie et al discloses the claimed television receiver as described above in claim 49. The Richards et al reference does not specifically disclose that a history of communications with said response information receiving equipment is stored in memory, and notification data is generated. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to automatically create and maintain communication logs or histories of successful or failed communications with the receiving equipment and to generate appropriate notification data accordingly. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have a history of communications with said response information receiving equipment stored in memory, and generate notification data for the advantages given above.

As to claim 52, the Richards et al reference as combined with Gammie et al further discloses storing or memory means for storing said response information to be transmitted after a



Art Unit: 2623

delay as shown by RAM 40 in Fig. 2, and the claimed notification means is met by the DVHT 14, which includes the “boot” program 43 contained in ROM 42, the randomized array in RAM 40, and the CPU 38, which operate to transmit a message and the AMI 23 sends an acknowledgement back if the message is received (see col. 5, lines 35-54 and col. 7, lines 2-25).

As to claim 53, the Richards et al reference as combined with Gammie et al discloses the claimed television receiver as described above in claim 52. The Richards et al reference does not specifically disclose editing means for editing said response information when an edit instruction is sent from a user. However, the Examiner takes Official Notice that it is notoriously well known in the art of interactive video distribution systems to have editing means for editing response information when an edit instruction is sent from a user for the advantages of allowing a user to change the information that is to going to be sent to the information receiving equipment and giving the user more versatility in communicating messages for transmission. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to include editing means for editing said response information when an edit instruction is sent from a user for the advantages given above.

As to claims 54-55, the claims are rejected based on similar grounds as described in the rejection of claims 40 and 56.

As to claim 56, note the Richards et al reference which discloses a data receiving device. The claimed means for receiving data sent from a broadcasting device is met by the Digital Video Home Terminals (DHVT 14) as shown in Fig. 1. Regarding the claimed, “communication means for transmitting response information via a separate communication line”, Richards discloses that the DHVT 14 transmits uplink information over communication line 18/22 to the

Art Unit: 2623

AMI 22 as shown in Fig. 1 (see col. 2, lines 51-65 and col. 3, lines 5-19). Richards et al does not explicitly disclose a “separate” communication line. However, Gammie et al specifically teaches an integrated receiver decoder 206, which receives broadcast data via a satellite link 205 and also transmits and receives data via a separate communication link as met by telephone network 207 (see Fig. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Richards et al reference with the additional teachings of the Gammie et al reference which teaches or discloses the use of a separate communication line (i.e. a telephone network) for use in transmitting and receiving data at a receiver system for the advantage of providing two way communications in systems where the broadcast network is only a unidirectional network (i.e. a satellite receiver system). In addition to, it is also well known to have separate communication links, such as telephone networks, in cable TV or broadband communication systems where there is limited or no upstream communication capabilities. One of ordinary skill in the art would have been led to make such a modification since the use of a separate communication line is well known in the art for the advantages given above. The claimed, “wherein said receiving means receives determining data for determining initial transmission scheduling time and retrial information containing a retrial period transmitted by said broadcasting station at the same time”, is met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT’s attempts and reattempts in sending messages to the AMI 23 (see col. 5, lines 42-48 and col. 6, lines 43-53). The remainder of the claim limitations are met by the rejection of claim 40 as described above.

Art Unit: 2623

As to claim 70, the Richards et al reference as combined with Gammie et al discloses a data transceiving method for receiving data from a broadcast device and sending response information via a separate communication line to response information receiving equipment as described above (see claim 40 for example). The claimed transmitting data for determining initial transmission scheduling time and retrial information containing a retrial period transmitted at the same time from said broadcasting device, is met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 or communication line 18/22 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT's attempts and reattempts in sending messages to the AMI 23 (see Fig. 1 & col. 5, lines 42-48 and col. 6, lines 43-53). The claimed sending said response information via a separate communication line to said response information receiving equipment is also met by the Gammie et al reference as described above. The remainder of the claim limitations are met by the rejection of claim 40 as described above.

As to claim 71, the Richards et al reference discloses a recording medium for storing a program as met by the ROM 42 that has the boot program 43 (col. 5, lines 35-48) that performs all of the claimed processing in combination with the Gammie et al reference as described in the system/receiver claims previously described above (e.g. claims 40 and 56).

As to claims 72-73, the claims are rejected based on similar grounds as described in the rejection of claims 56 and 59 respectively.

Art Unit: 2623

5. Claims 43, 47, 60 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al., in view of Gammie et al, in further view of Corrigan et al (USPN 5,966,636), all cited by the Examiner.

As to claims 43 and 60, the Richards et al and Gammie et al references disclose the claimed television and data receiver as described above in claims 40 and 56 respectively. The Richards et al reference as combined with Gammie does not specifically disclose detection means for detecting causes of non-establishment of communications with said response information receiving equipment. The Corrigan et al reference teaches the claimed detection means for detecting causes of non-establishment of communications with said response information receiving equipment as described in col. 11, lines 48-53, where if the number of retries has been exceeded a message will be sent stating the cause for the access failure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the data receiver of Richards et al and Gammie et al with the error detection means of Corrigan et al for the advantage of notifying users of potential causes of the failed communication attempts. One of ordinary skill in the art would have been led to make such a modification since it would be beneficial to incorporate error detection means into the data receiver system for locating the causes of communication failures.

As to claim 47, Corrigan further discloses the claimed notification data is generated for making notification of said detected cause by sending a message stating the cause of the access failure (col. 11, lines 50-53).

As to claim 74, the claim is rejected based on similar grounds as described in the rejection of claim 60.

6. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et al., in view of Gammie et al, in view of Corrigan et al, and in further view of Lowell (USPN 6,012,086), all cited by the Examiner.

As to claim 44, the Richards, Gammie and Corrigan references disclose the claimed television receiver as described above in claim 43. The Richards, Gammie and Corrigan references do not explicitly disclose retrieval condition alteration means for altering conditions for subsequent retrieval transmissions from the next time on, on the basis of the cause detected. Lowell teaches that alternate phone numbers or sources may be used to connect based on errors in attempting to connect to the source server (see col. 7, lines 8-25 and col. 8, lines 15-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the television receivers of Richards, Gammie and Corrigan with the retrieval condition alteration means for altering conditions for retrieval transmissions from the next time on, on the basis of the cause detected, as disclosed by Lowell. One of ordinary skill in the art would have been led to make such a modification since it would be beneficial for the user if the receiver system automatically made attempts to alter the connection based on initial failed attempts and attempting to avoid the cause of those failed attempts.

As to claim 45, Richards discloses altering time intervals for retry attempts as previously described above, and Lowell further discloses that the retrieval condition alteration means may generate notification data for altering the number of times for retrieval transmissions (see col. 7, lines 10-12).

As to claim 46, Lowell further discloses that the retrial condition alteration means suspend retrial transmissions after a specified number of retry attempts have been made or if the server is down, etc... (see col. 7, lines 8-25 and col. 8, lines 15-30).

7. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gammie et al, in view of Richards et al.

As to claim 61, note the Gammie et al reference which discloses an IRD 206 and television receiver 220 (see Fig. 2). The claimed tuner for selecting a transport stream from data sent from a broadcasting source is met by tuner 304 (as shown in Fig. 3), which selects a channel from the incoming signal sent from the program broadcasting device 202 (see Figs. 2 & 3, col. 5, lines 5-9 and col. 5, line 66 – col. 6, line 3). The claimed transport stream decoder...and AV decoder for outputting display data of a selected service to a monitor is met by downconverter/demodulator 302 and descrambler 303 (Fig. 3). The claimed control input unit is met by user keypad 307 as shown in Fig. 3 or a remote control for transmitting a signal to the IRD (see col. 8, lines 58-66, also see col. 6, lines 5-11 and Figs. 2 and 3). The claimed line communication unit for sending response information via a separate communication line...is met by telephone network 207/modem 313 (Figs. 2-3). The claimed CPU is met by processor 304 and DCP 405 (see Figs. 3 and 4). The claimed memory is met by processor DCP 405, which may comprise a MC68HC11E9, which inherently comprises memory and a control program (col. 6, lines 62-65). Gammie discloses that the control program retransmits said response information via said line communication unit based on retrial information contained in the broadcast data, when communication with said response information receiving equipment is

Art Unit: 2623

unsuccessful is met by the system operator at the broadcasting station transmitting retry information or data to the decoders that were unable to successfully call-in, where all decoders with a retry bit set by the control program should call in when a retry window is opened by the system controller (see col. 8, lines 2-4, col. 11, lines 14-19 & 50-53, and col. 12, lines 26-27). Gammie et al does not explicitly disclose the claimed, “wherein said tuner receives determining data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time...” However, the Richards et al reference specifically teaches that the Set-Top Box/receiver or DVHT (Digital Video Home Terminal) 14 (col. 3, line 8), which inherently includes a tuner, “determines data for determining initial transmission scheduling time and retrial information transmitted by said broadcasting station at the same time...”, as met by the AMI (Administrative and Maintenance Interface) 23 transmitting along the RF Trunk 18 to the initializing DVHT (Digital Video Home Terminal) 14 the particular back-off array used for controlling the DVHT’s attempts and reattempts in sending messages to the AMI 23 (see col. 5, lines 42-48 and col. 6, lines 43-53). The DHVT or “communication means” also retransmits said response information to the “response information receiving equipment” or AMI 23 when communication between the television receiver and the response information receiving equipment is unsuccessful (see col. 5, line 36 – col. 6, line 53). In col. 5, line 36 – col. 6, line 53 of the Richards et al reference, the “receiver” or DHVT 14 (set-top box) receives the retrial information, or data contained in the broadcast data used for retransmitting said response information according to said retrial information when communication with said response information receiving equipment is unsuccessful, from the Administration and Maintenance Interface (AMI 23), which sends to the DHVT a particular back-off array used for

Art Unit: 2623

controlling the DHVT's attempts and reattempts in successfully sending messages without collision with other messages from other subscribers using the communication line (18, 20, 22, see Fig. 1 and col. 2, lines 51-65). The remainder of the claim limitations are met by Richards et al, in combination with Gammie et al (regarding the claimed "separate communication line), as described in the rejection of claim 40. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the Gammie et al reference with the Richards et al reference for the advantage of having the receiver/tuner determine initial transmission scheduling time and retrieval information transmitted by said broadcasting station at the same time and retransmitting the response information when communication is unsuccessful. One of ordinary skill in the art would have been led to make such a modification in order to simplify the transmission from the broadcasting device to the receivers by transmitting the information as described above at the same time.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37



Art Unit: 2623

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

**Any response to this action should be mailed to:**

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

United States Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Some correspondence may be submitted electronically. See the Office's Internet Web site <http://www.uspto.gov> for additional information.

Art Unit: 2623


**Or faxed to: 571-273-8300**

**Hand-delivered responses should be brought to the Customer Service Window at the address listed above.**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoyer  
November 10, 2006

  
**JOHN MILLER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**